

REMARKS

Claims 1-16 are pending in the application. Claims 1 and 8 are independent.

Claim Rejections - 35 U.S.C. § 103

(a) Claims 1-4, 8-11, and 15-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamashita et al. (USP 6,750,437) in view of Loose (USP 6,759,641), Nakano et al. (USP 6,094,220), and Suzuki et al. (USP 4,710,803). This rejection is respectfully traversed.

In the Office Action, the Examiner acknowledges that Yamashita does not disclose a plurality of composite pixels which are arranged in a photosensitive array and each of which includes of a main photosensitive cell, having a first area, and an auxiliary photosensitive portion, wherein, in the signal processing step, color difference gain processing for the image signal being switched in accordance with control of said control step to thereby lower a chroma of the image signal.

Therefore, the Examiner relies on the Loose, Nakano, and Suzuki references to show the steps and elements that are not disclosed or suggested by the Yamashita reference.

Loose discloses, in Fig. 2a, a switching circuit having a photodiodes PD1 and PD2. However, even assuming that the photodiode PD1 corresponds to the “main photosensitive cell” of the claimed invention of the present application, and the photodiode PD2 corresponds to the “auxiliary photosensitive cell” of the present invention, Loose fails to disclose that the photodiode PD1 has “a first area” and the photodiode PD2 has “a second area smaller than the first area,” as required in claim 1.

With regard to Nakano, the Examiner states that it would have been obvious to one of ordinary skill in the art to combine Nakano's method of signal processing with Yamashita's solid-state image sensor in order to extract an object on the standardized color difference plane with high accuracy due to a change of distribution of the object on the standardized color difference plane.

However, Applicants respectfully submit that Nakano does not disclose "a main photosensitive cell, having a first area, and an auxiliary photosensitive cell of a same color as the main photosensitive cell, the auxiliary photosensitive cell having a second area smaller than the first area," as required in claim 1.

With regard to Suzuki, the Examiner states that it "discloses a solid-state image sensor (fig. 3, ref. 1) including a plurality of composite pixels (figs. 3 and 4, ref. 10a) which are arranged in a photosensitive array and each of which includes a main photosensitive cell (fig. 4, refs. 28, 34, and 35), inherently having a first area, and an auxiliary photosensitive cell (fig. 3, ref. 29). Inherently having a second area smaller than the first area (col. 3, lines 35-67)."

In Suzuki, however, reference numeral 28, 34, and 35 indicate red photodiodes and reference numeral 29 indicates a green photodiode (see col. 3, lines 57-63). Therefore, even assuming that the photodiodes 28, 34, and 35 corresponds to the "main photosensitive cell" and the photodiode 29 corresponds to the "auxiliary photosensitive cell," which Applicants do not admit, Suzuki fails to disclose or suggest "an auxiliary photosensitive cell of a same color as the main photosensitive cell, the auxiliary photosensitive cell," as required in claim 1.

In view of this, even assuming that Yamashita, Loose, Nakano, and Suzuki can be combined, which Applicants do not admit, Yamashita in view of Loose, Nakano, and Suzuki fails to disclose or suggest the “preparing step” as recited in claim 1.

Claims 2-4 and 15, variously dependent on claim 1, are allowable at least for their dependency on claim 1.

Claim 8 is allowable at least for the similar reasons as stated in the foregoing with regard to claim 1.

Claims 9-11 and 16, variously dependent on claim 8, are allowable at least for their dependency on claim 8.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claims 5 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamashita in view of Loose, Nakano, and Suzuki, and further in view of Nakata et al. (USP 6,747,696). This rejection is respectfully traversed.

Claim 5, indirectly dependent on claim 1, is allowable at least for its dependency on claim 1.

Claim 12, indirectly dependent on claim 8, is allowable at least for its dependency on claim 8.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(c) Claims 6-7 and 13-14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamashita in view of Loose, Nakano, and Suzuki, and further in view of Ng et al. (USP 5,699,102). This rejection is respectfully traversed.

Claims 6-7, variously dependent on claim 1, are allowable at least for their dependency on claim 1.

Claims 13-14, variously dependent on claim 8, are allowable at least for their dependency on claim 8.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Conclusion

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of the pending claims in the present application are respectfully requested.


The Examiner is respectfully requested to enter this Reply After Final in that it raises no new issues. Alternatively, the Examiner is respectfully requested to enter this Reply After Final in that it places the application in better form for Appeal.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi (#40,417) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

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Respectfully submitted,

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